

Amendments to the Drawings:

The attached sheet of drawings includes changes to Figure 1B. This sheet includes Figures 1A and 1B, and replaces the original sheet including Figures 1A and 1B.

Attachment: 1 Replacement Sheet

REMARKS

Applicant respectfully requests reconsideration of this application, as amended, and consideration of the following remarks. Claims 1, 5, 6, 10-12, and 14-15 have been amended. Claims 2-4 and 13 have been canceled. Claims 1, 5-12 and 14-18 remain pending.

Figures 1B and 2A stand objected to. Applicant has amended Figure 1B and the specification relating to Figures 1B and 2A and requests these objections be withdrawn.

The title of the application stands objected to as being not descriptive. Applicant has amended the title to be "Method and Pipeline Architecture for Processing Multiple Swap Requests to Reduce Latency"

Claim 6 stands objected to due to a typographical error. The Examiner has requested a correction and Applicant has amended claim 6 to correct the typographical error. Applicant respectfully requests the objection to claim 6 be withdrawn and that claim 6 be reconsidered.

Claim 10 stands rejected under 35 U.S.C. 112, second paragraph. Applicant requests claim 10, as amended be reconsidered as set forth in more detail below.

Claims 1-3 and 9-12 stand rejected under 35 U.S.C. 101. Applicant traverses this rejection as set forth in more detail below.

Claims 1-18 stand rejected under 35 U.S.C. 102(b). Applicant traverses this rejection as set forth in more detail below.

Amendments

Revisions to the Specification and Drawings

The Examiner requested correction of certain errors in the specification and drawings. In response, Applicant has amended the specification and drawings accordingly. No new matter has been added. The amendments are supported in the drawings or elsewhere in the specification.

Amendments to the Claims

Applicant has amended the claims to more particularly point out what Applicant regards as the invention. No new matter has been added as a result of these amendments.

Rejections

Rejections under 35 U.S.C. §112, Second Paragraph

Claim 10 stands rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear what is meant by “the same register further includes the same register in a same processing thread.” Applicant has amended claim 10 to more particularly point out and distinctly claim the subject matter which applicant regards as the invention. Accordingly, Applicant requests this rejection be withdrawn and amended claims 10 be reconsidered.

Rejections under 35 U.S.C. §101

Claims 1-3 and 9-12 stand rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter.

Applicant has amended claims 1, 10-12, and respectfully submits that amended claims 1, 10-12 and those claims that may depend therefrom are directed to statutory subject matter. Accordingly, Applicant respectfully requests this rejection be withdrawn and the amended claims 1, 10-12 be reconsidered.

Rejections under 35 U.S.C. §102(b)

Claims 1-18 stand rejected under 35 U.S.C. § 102(b) as being unpatentable over Hennessy et al (Computer Architecture: A quantitative Approach). Applicant respectfully traverses the rejection in view of the amended claims 1, 5, 6, 10-12, 14 and 15.

As to claims 1, 12 and 15, the Hennessy reference does not teach nor even suggest a pipeline architecture or a method for processing a plurality of swap requests including receiving a first swap request in a pipeline wherein the first swap request requests swapping active contents of a active register window with a first contents from a first register and executing the first swap request. Executing the first swap request includes executing a first save operation wherein the active contents of the active register window is saved to corresponding register and executing a first restore operation, wherein the first contents of the first register are restored to the active

register window. The method also includes receiving a second swap request in the pipeline immediately subsequent to the first swap request, wherein the second swap request requests swapping the first contents in the active register window with a second contents from a second register. The first register is examined to determine if the first register is a same register as the second register. The second swap request is executed if the first swap request and the second swap request do not swap the same register. Executing the second swap request includes executing a second save operation wherein the first contents of the active register window is saved to first register at substantially simultaneously with the executing the first restore operation and executing a second restore operation, wherein the second contents of the second register are restored to the active register window.

The Hennessey reference does not teach or even suggest each and every limitation as recited in claims 1, 12 and 15.

Accordingly, Applicant respectfully submits that Applicant's invention as claimed in claims 1, 12 and 15 and those claims that depend from one of claims 1, 12 and 15 are patentable over the Hennessey reference, and respectfully request the withdrawal of the rejection under 35 U.S.C. § 102(b).

SUMMARY

In view of the foregoing amendments and remarks, Applicant respectfully submits that the pending claims are in condition for allowance. Applicant respectfully requests reconsideration of the application and allowance of the pending claims.

If the Examiner determines the prompt allowance of these claims could be facilitated by a telephone conference, the Examiner is invited to contact George B. Leavell at (408) 749-6900, ext 6923.

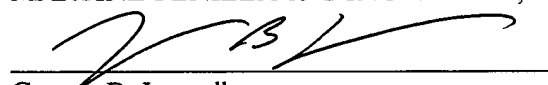
Deposit Account Authorization

Authorization is hereby given to charge our Deposit Account No. 50-0805 (Ref # SUNMP351) for any charges that may be due or credit our account for any overpayment. Furthermore, if an extension is required, then Applicant hereby requests such extension.

Respectfully submitted,

MARTINE PENILLA & GENCARELLA, LLP

Dated: June 18, 2006



George B. Leavell
Attorney for Applicant
Registration No. 45,436

710 Lakeway Drive, Suite 200
Sunnyvale, CA 94085
(408) 749-6900 ext 6923